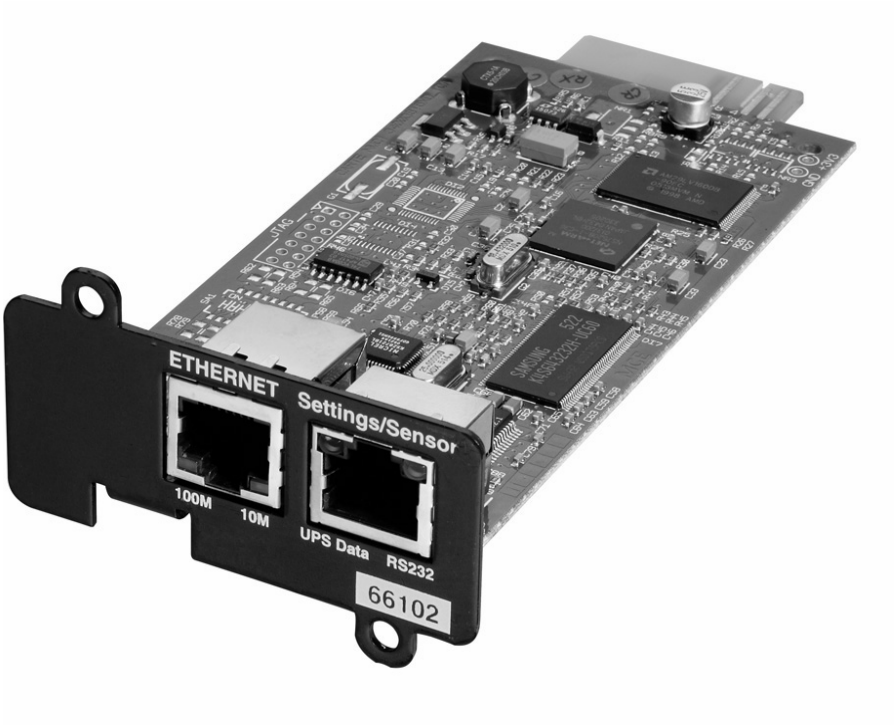

Network Management Card Minislot 2006 Edition
(66102)

Installation manual

MGE UPS SYSTEMS

THE UNINTERRUPTIBLE POWER PROVIDER

34003905EN/AA

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MGE UPS SYSTEMS

THE UNINTERRUPTIBLE POWER PROVIDER

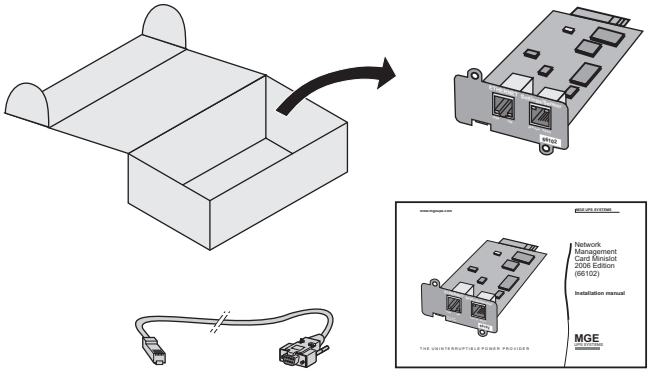
INTRODUCTION

The **Network Management Card (66102)** is recommended for central UPSs protecting entire networks or for UPS units backing up critical loads.
With the card installed, the UPS has its own IP address and uses the local computer capabilities to:

- supply web pages (http or https (SSL)) with information on status conditions and measurements/settings/alarms,
- integrate an SNMP-based NMS such as HP OpenView, IBM Tivoli Netview and Computer Associates Unicenter,
- communicate with shutdown modules installed on the protected servers (Network Shutdown Module),
- send e-mail and SMS messages,
- control the ON/OFF function of the UPS and the outlets,
- monitor the Environment Sensor (optional, cat. no. 66846).

UNPACKING AND CHECKS

- One **Network Management Card** (66102),
- One serial cable for configuration (34003918),
- One installation manual (34003905).



CHECK ON UPS VERSION

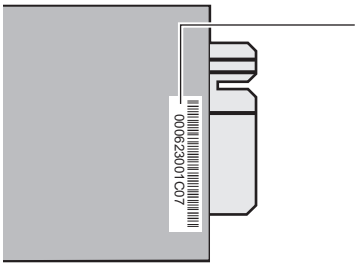
Important. Before installing the card, check that the UPS technical level (NT) is at least equal to that indicated in the table below.

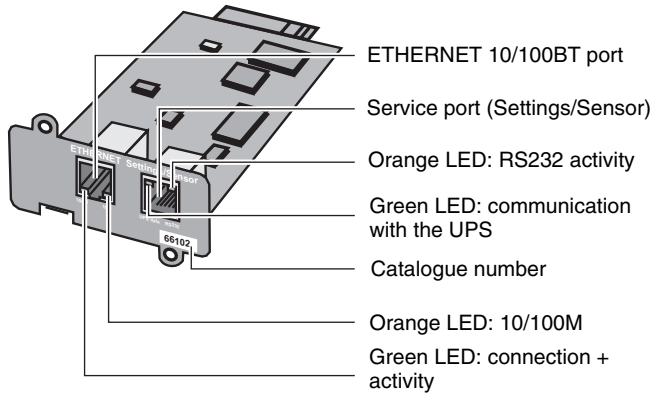
UPS	Type	Technical level (NT)
Pulsar Extreme C	700/1000/1500	B2
Pulsar Extreme C	2200/3200	02
Pulsar Evolution	500/800/1100	06
Pulsar Evolution	1500	05
Pulsar Evolution	2200/3000	05
Pulsar EX RT (US)	700/1000/1500	03
Pulsar EX 2200 RT (US)	2200	09
Pulsar EX 3200 RT (US)	3200	09

Note.

- If the technical level of the UPS is lower than that indicated in the table, contact MGE UPS SYSTEMS.
- The **Network Management Card** (66102) is not compatible with the **Pulsar EX 7/10/15/20/30** and **Pulsar ESV+ 8/11/14/22** ranges.

OVERVIEW





INDICATIONS

ETHERNET port

LED	Colour	Status	Description
ACT	Green	◗ OFF ◗ ON ◗ Flashing	◗ Card not connected to network ◗ Card connected to network, but no activity ◗ Port is sending/receiving
100M	Orange	◗ OFF ◗ ON	◗ Port operating at 10 Mbits/s ◗ Port operating at 100 Mbits/s

Service port (Settings/Sensor)

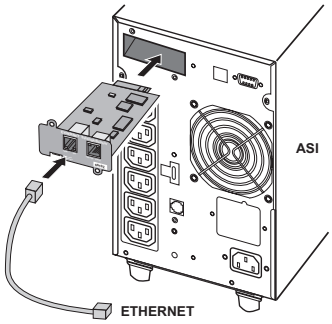
LED	Colour	Status	Description
UPS Data	Green	◗ OFF ◗ ON ◗ Flashing	◗ Card starting ◗ Communicating with UPS ◗ Normal operation Communication with UPS is operational
RS232	Orange	◗ OFF ◗ ON ◗ Flashing	◗ Configuration menu activated ◗ Normal operation Configuration menu not activated ◗ Communication with Environment Sensor (option)

INSTALLATION

The **Network Management Card** (66102) can be hot-plugged on all UPSs from MGE UPS SYSTEMS equipped with a Minislot. It is not necessary to shutdown the UPS, disconnect the load or restart the UPS.

◗ Remove the plastic cover of the Minislot.

◗ Note the MAC address of the card before inserting it.



◗ Insert and secure the card with the screws.

◗ Connect the ETHERNET cable.

◗ Check the ETHERNET port indications.

◗ Wait until the UPS Data LED flashes regularly (approx. two minutes), indicating that card start-up has terminated correctly.

Note. Connection detection continues until the card has been connected to the network. Once connection is made, card start-up continues.

IP SETTINGS

Once the card has started, proceed as indicated below.

◗ Connect one end of the cable (34003918) to the Service port.

◗ Connect the other end of the cable to the COM (IOIOI) port of a PC.

◗ Run a terminal emulator such as HyperTerminal™:

>Bits per second: 9600 Data bits: 8

>Parity: none Stop bits: 1

>Flow control: none

>"Echo typed characters locally" option: disabled

◗ Type MGEUPS or mgeups, then press the ↵ key.

The main configuration menu is displayed.

```
---------------------------------------------------------------------------
MGE UPS SYSTEMS
NETWORK MANAGEMENT CARD
---------------------------------------------------------------------------
   1 : Reset
   2 : Network configuration
   3 : Set Login Password to Default
   4 : Return to Default Configuration
   5 : Exit
---------------------------------------------------------------------------
```

Your network is equipped with a BOOTP/DHCP server

◗ The card is configured by default with this service enabled.

◗ No manual configuration is required.

◗ The IP parameters are automatically collected by the card.

◗ To view the IP parameters, enter 2 (Network configuration), then enter 1 (Read Network settings).

The settings supplied by the server are displayed.

```
Network configuration :
   Mode : DHCP
   MAC address : 000623001C07
   IP address : 172.17.23.18
   Subnet mask : 255.255.248.0
   Gateway : 172.17.17.1
```

◗ Note the IP address.

◗ To exit this function, enter 3, then 5 (Exit).

Your network is not equipped with a BOOTP/DHCP server

◗ Manual configuration is required.

◗ In the main menu, enter 2 (Network configuration), then again 2 (Modify Network settings).

◗ Follow the instructions and enter the IP parameters.

◗ Wait until "Done" is displayed, indicating that the IP parameters have been saved.

◗ Return to the main menu and enter 1 (Reset). The card restarts with the new IP settings (after approx. two minutes).

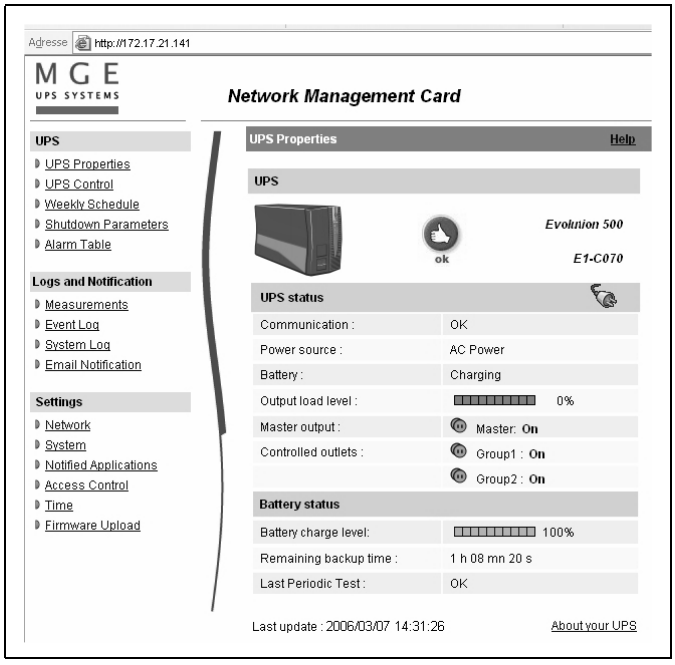
```
---------------------------------------------------------------------------
   1 : Read Network settings
   2 : Modify Network settings
   3 : Exit
---------------------------------------------------------------------------
For each of the following questions, you can press "Return" to select
the value shown in braces, or you can enter a new value.
Should this target obtain IP settings from the network?[N] N
Static IP address [172.17.16.16]? 172.17.21.141
Subnet mask IP address [255.255.0.0]? 255.255.255.0
Gateway address IP address [0.0.0.0]? 172.17.17.1
Done
```

ACCESS TO SUPERVISION

To check whether the **Network Management Card** is operational after installation and configuration, proceed as follows.

◗ Run a browser and enter in the address bar:
http://IP address/ (e.g. http://172.17.21.141/)

◗ The home page is displayed.



◗ Set the time by clicking the Time command.

◗ Continue configuration via the sections in the Settings menu.

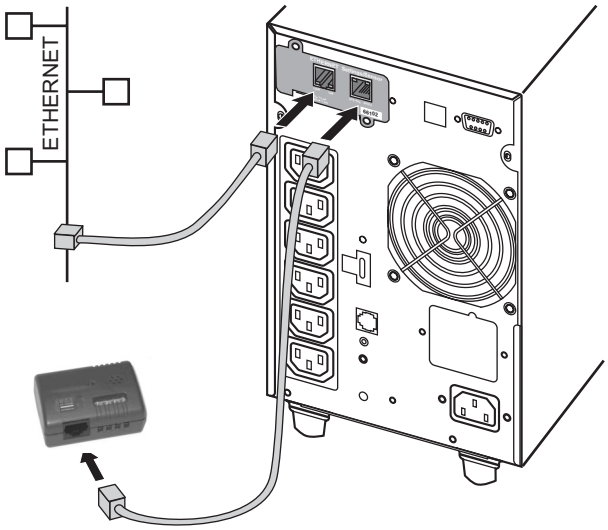
USER MANUAL

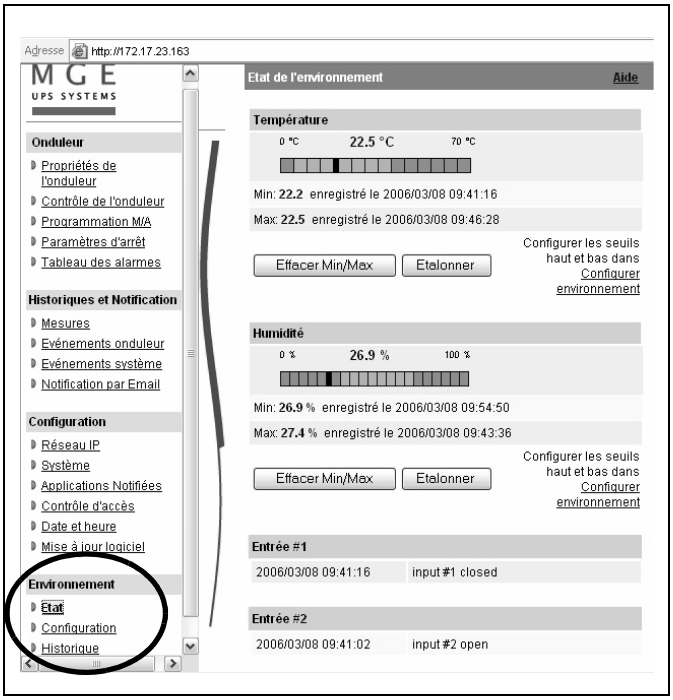
This manual provides all the information required to install and configure the **Network Management Card**.

For more information on the supervision, control and configuration functions offered by the **Network Management Card**, see the user manual on the **Solution-Pac 2** CD-ROM or in the Products/Power Management section of the **www.mgeups.com** site.

SENSOR CONNECTION (option)

The Environment sensor is a **Network Management Card** option. It is available from MGE UPS SYSTEMS (cat. no 66846).
The sensor remotely monitors the UPS environment by regularly measuring the temperature and humidity, and checking the states of two external contacts. It can also send alarms (e-mail, SNMP trap) tripped by pre-set thresholds.
Connection is made via the Service port (Settings/Sensor) on the **Network Management Card**. The sensor is detected automatically. Configuration and supervision use a menu that may be accessed directly from the home page. For more information, see the user manual of the **Network Management Card.**





TECHNICAL CHARACTERISTICS

Physical characteristics	
Dimensions (W x D x H)	132 x 66 x 42 mm
Weight	70 g
RoHS	100% compatible
Storage	
Storage temperature range	-10°C to 70°C
Ambient conditions	
Operating temperature range	0°C to 40°C
Relative humidity	90% RH max. without condensation
Card performance	
Supply voltage	5V ±5%
Supply current (all LEDs ON and Environment Sensor connected)	300 mA max.
Functions	
Web supervision	5 browsers max. (http), 3 browsers max. (https)
Languages	English, French, German, Italian, Spanish
Alarms	E-mail, SNMP TRAP, Web page
Log	400 measurements or events
Server protection	Up to 50 servers protected
Network	Fast ETHERNET, 10/100 Mbits, auto-negotiation HTTP 1.1, SNMP V1, NTP, TFTP, SMTP, BOOTP/DHCP
Identification	User name and password
Security	SSL 3.0, TLS 1.0
Browsers	Microsoft Internet Explorer 6.x or higher
NMS	Enterprise Power Manager (EPM) Management-Pac 2
MIB	MIB II standard - MGE V1.7 MIB
Settings (default values)	
IP network	BOOTP/DHCP enabled IP address: 172.17.16.16 Subnet mask: 255.255.0.0 Gateway: 0.0.0.0 NTP server: pool.ntp.org
Web-page access control	User name: MGEUPS Password: MGEUPS
Service-port menu access control	Password: MGEUPS or mgeups (not modifiable)
Date and time	Synchronise with an NTP server (GMT)
Service port	9600 bits/s, 8 bits, 1 bit stop, no parity

ELECTROMAGNETIC COMPATIBILITY

When correctly installed and used in accordance with manufacturer instructions, the card complies with the following standards:

- ITE (Information Technology Equipment) safety: IEC/EN 60950-1 2002
- EMC: EN 61000-6-2 (2002), EN 61000-6-3 (2002), IEC/EN 62040-2 (2002)

In compliance with European directives:

- Low voltage: 73/23/EEC and 93/68/EEC.
- EMC: 89/336/EEC and 93/68/EEC.

Federal Communication Commission (FCC) statement
This equipment has been tested and found to comply with the limits for a **Class B** digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

WEB SITE

The information presented in this manual is also available in other languages in the download section of the MGE UPS SYSTEMS site **(www.mgeups.com)**.